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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,159	06/20/2003	Joshua T. Goodman	MSFTP418US	7622
27195 7590 11/30/2007 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER COULTER, KENNETH R	
			ART UNIT 2141	PAPER NUMBER
			NOTIFICATION DATE 11/30/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/601,159

Applicant(s)

GOODMAN ET AL.

Examiner

Kenneth R. Coulter

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 8/23/07.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 71 and 70 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claim 71 and dependent claim 70 are directed to software that is not implemented on a computer-readable **storage** medium.

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 75 are rejected under 35 U.S.C. 102(e) as being anticipated by Bates (U.S. Pat. No. 6,779,021) (Method and System for Predicting and Managing Undesirable Electronic Mail).

2.1 Regarding claim 1, Bates discloses a system that facilitates mitigation of outgoing spam, comprising:

a detection component employed by an outgoing message server that detects a potential spammer in connection **with at least one of number of apparently legitimate outgoing messages**, or number of non-deliverable messages for an entity (Abstract; Fig. 4A, items 88, 90, 92; Fig. 4B, item 120; col. 8, line 48 – col. 9, line 2 If the **new e-mail is not a confirmed match as spam**, then the process passes to block 92 ... Block 92 depicts a determination as to whether or not the number of recipients of the new e-mail is greater than a designated "A" number of recipients ... In addition, an outside source may designate the "A" number of recipients above which an e-mail is predicted as spam. If the **number of recipients of the new e-mail is greater than a designated "A" number of recipients**, then the process passes to block 120."; col. 10, lines 18 – 22 "Block 120 illustrates marking the new e-mail as **predicted spam**."); and

an action component that upon receiving information from the detection component that the entity is a potential spammer, initiates at least one action that facilitates **any one of** confirming that the entity is a spammer, mitigating spamming by the entity, or increasing spammer cost, and a combination thereof (Abstract; col. 6, line 64 – col. 7, line 6).

2.2 Per claim 2, Bates teaches the system of claim 1, the outgoing message further comprising email message spam (col. 6, lines 12 – 25 “spam”; col. 6, line 64 – col. 7, line 6).

2.3 Regarding claim 3, Bates discloses the system of claim 1 wherein the action initiated comprises at least one of: shutting down the potential spammer's user account; requiring any one of a HIP challenge and a **computational challenge** to be solved by the potential spammer and the potential spammer computer, respectively; sending the potential spammer a legal notice regarding at least one violation of messaging service terms; and manual inspection of at least a subset of outgoing messages generated by the potential spammer (Abstract; Fig. 4A; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.4 Per claim 4, Bates teaches the system of claim 1, wherein message volume monitoring comprises at least one of tracking or counting outgoing messages (col. 7, lines 23 – 47).

2.5 Regarding claim 5, Bates discloses the system of claim 1, wherein the recipient count is computed with each recipient counted only once (col. 7, lines 23 – 47).

2.6 Per claim 6, Bates teaches the system of claim 5, comprising keeping track of the maximum score per recipient (col. 7, lines 23 – 47).

2.7 Regarding claim 7, Bates discloses the system of claim 5, comprising using a pseudo-random function of recipients to estimate the recipient count, or related scores (Abstract; col. 4, lines 45 – 52; col. 7, lines 23 – 47).

2.8 Per claim 8, Bates teaches the system of claim 1 wherein the message rate monitoring comprises computing the volume of outgoing messages over a duration of time (Fig. 4A; col. 7, lines 23 – 47).

2.9 Regarding claim 9, Bates discloses the system of claim 8, wherein the duration of time comprises at least one of minutes, hours, days, weeks, months, and years (col. 7, lines 23 – 47 “particular time period”).

2.10 Per claim 10, Bates teaches the system of claim 1, wherein the message volume monitoring comprises a total volume of messages since activation of a user account (col. 11, lines 10 – 18 “log-in”; Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line

6).

2.11 Regarding claim 11, Bates discloses the system of claim 1, wherein each recipient of an outgoing message constitutes one message (Abstract; col. 4, lines 45 – 52; col. 7, lines 23 – 47).

2.12 Per claim 12, Bates teaches the system of claim 1, wherein the recipient count comprises one or more recipients listed in at least one of a to: field, a cc: field, or a bcc: field (col. 2, lines 50 – 67).

2.13 Regarding claim 13, Bates discloses the system of claim 1, wherein the detection component processes and analyzes the outgoing messages to determine at least one of whether the message is likely to be spam or whether the sender is a potential spammer (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.14 Per claim 14, Bates teaches the system of claim 1, wherein the number of apparently legitimate messages is used as a bonus to offset other scores (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.15 Regarding claim 15, Bates discloses the system of claim 14, wherein the number of apparently legitimate messages is estimated with a spam filter (col. 6, lines 12 – 25; col. 6, line 64 – col. 7, line 6).

2.16 Per claim 16, Bates teaches the system of claim 14, wherein the bonus from the number of apparently legitimate messages is limited (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.17 Regarding claim 17, Bates discloses the system of claim 1, wherein the number of non-deliverable messages is estimated at least in part from failures at message delivery time (col. 7, lines 23 – 47).

2.18 Per claim 18, Bates teaches the system of claim 1, wherein the number of non-deliverable messages is estimated at least in part from Non Delivery Receipts (col. 7, lines 23 – 47).

2.19 Regarding claim 19, Bates discloses the system of claim 18, wherein validity of the Non Delivery Receipts is checked (col. 7, lines 23 – 47).

2.20 Per claim 20, Bates teaches the system of claim 19, wherein validity of the Non Delivery Receipts is checked against a list of recipients of messages from the sender (col. 7, lines 23 – 47).

2.21 Regarding claim 21, Bates discloses the system of claim 20, wherein the list of recipients is a sample and the penalty of a Non Delivery Receipt is correspondingly



increased (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.22 Per claim 22, Bates teaches the system of claim 1, wherein the detection component computes scores assigned to the outgoing messages to determine a total score per sender and compares the total score per sender with at least one threshold level to ascertain whether the sender is a potential spammer (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.23 Regarding claim 23, Bates discloses the system of claim 22, wherein threshold levels are adjustable per sender (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6; col. 7, lines 23 – 47).

2.24 Per claim 24, Bates teaches the system of claim 1, wherein spam filtering comprises employing a filter trained to recognize at least one of non-spam like features or spam-like features in outgoing messages (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.25 Regarding claim 25, Bates discloses the system of claim 1, wherein spam filtering is performed with a machine learning approach (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.26 Per claim 26, Bates teaches the system of claim 1, wherein spam filtering

comprises assigning a probability per outgoing message to indicate a likelihood that the message is any one of more spam-like or less spam-like (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.27 Regarding claim 27, Bates discloses the system of claim 1, further comprising a scoring component that operates in connection with at least one of the spam filtering, total recipient count, unique recipient count, message volume monitoring, or message rate monitoring (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.28 Per claim 28, Bates teaches the system of claim 27, wherein the scoring component assigns a score per sender based at least in part upon at least one of volume of outgoing messages, rate of outgoing messages, recipient count, or message content (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.29 Regarding claim 29, Bates discloses the system of claim 27, wherein the scoring component assigns and/or adds a constant value to one or more outgoing messages to mitigate spammers from manipulating spam filtering systems (Abstract; Fig. 4A; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.30 Per claim 30, Bates teaches the system of claim 27, wherein the scoring component assigns a selected value to outgoing messages identified as having at least

one spam-like feature (Abstract; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.31 Regarding claims 31 – 33, Bates does not explicitly disclose other spam-like features such as a URL or telephone number.

However, these features are commonly included in spam in order for the spam recipient to have access to the spammer.

2.32 Per claim 34, Bates teaches the system of claim 1 further comprising a user-based message generator component that generates outgoing messages addressed to one or more recipients based in part upon sender preferences (Abstract; Fig. 4A; col. 4, lines 45 – 52; col. 6, line 55 – col. 7, line 6).

2.33 Regarding claims 35 – 75, the rejection of claims 1 – 34 under 35 USC 102(e) (paragraphs 2.1 – 2.32 above) applies fully.

3. Claims 61 – 70 and 74 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson (U.S. Pat. Pub. No. 2004/0015554) (Active E-Mail Filter With Challenge-Response).

3.1 Regarding claim 61, Wilson discloses a method that facilitates periodic validation of non-spammer like activity by a user account comprising:

monitoring the user account for at least one of a volume of outgoing messages, a volume of recipients in one or more outgoing messages, or a rate of outgoing messages (Abstract; paragraphs 23, 37);

requiring an owner of the user account to resolve one or more challenges after at least one of a number of outgoing messages counted exceeds a predetermined threshold or a number of recipients counted exceeds a predetermined threshold (Figs. 1, 2, 3, 5; paragraphs 61 – 63); and

suspending delivery of subsequent outgoing messages from the user account until the one or more challenges are resolved (Abstract; Figs. 1, 2, 3, 5; paragraphs 23, 24).

3.2 Per claim 62, Wilson teaches that each recipient listed in a message counts as an individual message (Figs. 1, 2, 3, 5; paragraphs 61 – 63).

3.3 Regarding claim 63, Wilson discloses that the challenge is a computational challenge (Fig. 1; paragraphs 45, 55).

3.4 Per claim 64, Wilson teaches that the challenge is a human interactive proof (Fig. 5; paragraph 77).

3.5 Per claims 65 – 70 and 74, the rejection of claims 61 – 65 (paragraphs 3.1 – 3.4 above) applies fully.

***Response to Arguments***

4. Applicant's arguments filed 9/10/07 have been fully considered but they are not persuasive.

Claims 1, 35, 71, 72, and 73

Applicant argues Bates does not disclose the detection of a potential spammer based on the at least one of number of apparently legitimate outgoing messages or on the number of non-deliverable messages for an entity.

Examiner disagrees.

As the revised rejection above details, Bates teaches detects a spammer based on the number of apparently legitimate outgoing messages (Abstract; Fig. 4A, items 88, 90, 92; Fig. 4B, item 120; col. 8, line 48 – col. 9, line 2 If the new e-mail is not a confirmed match as spam, then the process passes to block 92 ... Block 92 depicts a determination as to whether or not the number of recipients of the new e-mail is greater than a designated "A" number of recipients ... In addition, an outside source may designate the "A" number of recipients above which an e-mail is predicted as spam. If the number of recipients of the new e-mail is greater than a designated "A" number of recipients, then the process passes to block 120."; col. 10, lines 18 – 22 "Block 120 illustrates marking the new e-mail as predicted spam.").

Claim 38

Applicant argues that Bates does not disclose a total score per sender scenario of claim 38.

Examiner disagrees.

Bates clearly discloses the total score per sender scenario of claim 38 (Abstract; col. 4, lines 45 – 51 “a percentage of predictability as spam”; col. 7, lines 7 – 12 “percentage of likelihood as spam”).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Coulter whose telephone number is 571 272-3879. The examiner can normally be reached on M - F, 7:30 am - 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/601,159  
Art Unit: 2141

Page 14

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krc

KENNETH R. COULTER  
PRIMARY EXAMINER  
